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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/892,784

06/27/2001

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Westphal.6311

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7590

03/03/2006

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EXAMINER

CHANKONG, DOHM

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,784

Applicant(s)

BAHREN ET AL.

Examiner

Dohm Chankong

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 14-21 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 14-21 and 24-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1> This action is in response to Applicant's amendment and remarks, filed 11.30.2005. Claims 11, 21 and 28 were amended. Claims 12, 13, 22 and 23 were cancelled. Claims 11, 14-21 and 24-30 are presented for further examination.

2> This is a final rejection.

Response to Arguments

3> Applicant's amendments necessitate the new ground(s) of rejection set forth in this action.

4> Applicant's arguments have been carefully considered but they are not persuasive. Applicant's amendment do not distinguish the claimed invention over the prior art reference, Jha, U.S Patent No. 6.771.663. Applicant amends the independent claims to now include new limitations that substantively describe two portions of the header section within a data telegram. The Office maintains that Jha discloses these two portions as claimed.

Because of the claim's sentence structure, the amended limitations are somewhat confusing. Therefore, the Office sets forth its interpretation of the limitations within the discussion of each limitation.

5> The first portion is directed to a telegram identification portion that specifies an

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“identification of data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the host network standard contains an identification of data associated with the extraneous standard.” Essentially, the Office interprets this limitation as directed to a portion within the header section of a packet that is responsible for identifying whether the data in the first section is formatted as an extraneous standard is also responsible for identifying when that first section contains data that is formatted according to the host network standard.

Jha discloses checking the header portion of his telegram to determine whether or not the payload of the telegram [payload corresponds to claimed first region of the data section] contains data formatted to the host standard or to a different, extraneous standard [Figure 11 «item 302» | column 11 «lines 26-37»]. Jha’s path signal value (PSL) corresponds to the claimed telegram identification portion. Jha’s PSL is contained within the header of the telegram [Figure 7 «item 206»] and identifies the type of data located in the data section [column 7 «lines 52-57»].

6> The second portion is directed to a telegram length portion that specifies a length of the data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the host network standard no longer specifies the length of the data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the extraneous standard. Here, the Office interprets this limitation as disclosing a portion that discloses the length of the data in the first region when it is formatted in accordance with the host standard but the same

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portion stops specifying the length of the data in the first region when the data in the first region is formatted in accordance with the extraneous standard.

In plain language, the header contains a portion that specifies the length of the data when the data is of the host standard. When the data is not of the host standard, then the portion no longer specifies the length of the data associated with the host network standard. On its face, this functionality seems self-evident. That is, when the data is of an extraneous standard, then the length portion no longer identifies the length of the data that is of the host network standard which makes sense because the data is now of the extraneous standard, not the host standard.

Jha discloses this functionality. Jha discloses: "The header 202 may comprise one or more of the following parameters: (i) *packet length*, (ii) *length of CRC (Cyclic Redundancy Check)...*" [emphasis added] [column 7 «lines 61-65»]. The packet length specifies the length of the data contained in the payload . Further, Jha discloses determining whether or not the payload information contains data of the host standard or of a different, extraneous standard [column 11 «lines 36-47»]. Thus, while not explicitly described, Jha's packet length discloses the length of the data whether the data is formatted according to the host standard or the extraneous standard. When the data is formatted according to the extraneous standard, the packet length refers only to the data of the extraneous standard and not of the host standard.

Thus, Jha discloses the two portions of the header section as claimed.

7> Applicant argues that there is no teaching "of portions of the header section used in accordance with the host network standard that are now used in accordance with the

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extraneous standard.” Applicant’s remarks, pg. 9 ¶ 3. However, as discussed above, Jha discloses that same portions of the header section are used regardless of the format of the data contained in the data section. For example, Jha’s PSL portion within the header section is used as an identifier for both the host standard and any other standards that the data may be formatted.

Applicant asserts that the novelty of his claimed portions enable a host network to communicate data that is in a format different from the format utilized by the host network. Id. Jha’s header portions, disclosing the same functionality as claimed in Applicant’s claims, achieve the same goals of enabling a fiber network having a SONET protocol to transmit data of various types [column 1 «lines 24-35» | column 5 «lines 48-55»].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8> Claims 11, 14, 18 and 20 are rejected under 35 U.S.C § 103(a) as being unpatentable over Jha, U.S Patent No. 6.771.663.

9> As to claim 11, Jha discloses a data telegram for transmitting data within a host network having a standard for the transmission of the data within the host network, the data telegram comprising:

a data section having a pair of regions, one region in the pair of regions containing data formatted in accordance with an extraneous standard that is different than the host network standard [Figure 7 | Figure 9 «item 274» | column 5 «lines 52-55» | column 7 «lines 39-60» where: the host network utilizes a SONET protocol]; and

a header section that contains information specifying that the data within the data section are formatted according to the extraneous standard, where a second region in the pair of regions in the data section contains header information associated with the extraneous standard specified by the information in the header section, where a telegram identification portion of the header section that specifies an identification of data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the host network standard contains an identification of data associated with the extraneous standard [Figure 7 «items 204a, 204b, 204c» | column 5 «line 67» to column 6 «line 5» | column 7 «lines 39-60» | column 9 «lines 55-60» | Figure 11 «item 302» | column 11 «lines 26-37»].

Jha also discloses a telegram length portion of the header section that specifies a length of the data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the host network standard [column 7 «lines 61-65» | column 10 «lines 27-30»] but does not expressly disclose that the portion no longer specifies the length of the data associated with the host network standard when the

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data in the first region of the data section is formatted in accordance with the extraneous standard.

However, this functionality is implied by Jha's disclosure. Jha discloses that the data in the data section of the telegram may be formatted in accordance with both host or extraneous standards [column 11 «lines 26-37»]. Thus, when the data is in accordance with the extraneous standard, the length portion specifies the length of the data of the extraneous standard and not the host standard. Therefore Jha implicitly discloses that the telegram length portion no longer specifies the length of the data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the extraneous standard.

10> As to claim 14, Jha discloses the data telegram of claim 11, where the data telegram is divided into frames, the frames into blocks, and the blocks into bytes [Figure 7 | column 8 «lines 20-42»].

11> As to claim 18, Jha discloses the data telegram of claim 11, wherein the extraneous standard comprises Internet Protocol (IP) standard [column 7 «lines 46-49»].

12> As to claim 20, Jha discloses the data telegram of claim 11, where the header section of the data telegram is formatted in accordance with the host network standard [column 7 «lines 39-60» where the host network is SONET (use of the payload envelope)].

13> Claims 15 and 16 are rejected under 35 U.S.C § 103(a) as being unpatentable over Jha, in view of the MOST Specification Framework Rev. 1.1 [“MOST spec”].

14> As to claim 15, Jha does disclose a header section with the information contained in the header [column 9 «lines 20-30»] and the information is contained in a predetermined location in the header section [Figure 7 «item 206»] but does not specifically disclose a data telegram where the host network comprises a MOST network, where the host network standard comprises a standard associated with the MOST network.

15> The MOST spec discloses a data telegram wherein the first data transmission protocol is MOST and the host network standard is the MOST standard [section 2.1 | section 3 | section 6 (“MOST Frame Structure”)]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the MOST protocol and standard in Jha’s network to obtain MOST’s advantages of increasing the speed of the network and decreasing cost of technology in automotive environments. Jha suggests this implementation as his network is fully compatible with current and future optical (fiber) networks [column 14 «lines 1-23»].

16> As to claim 16, Jha does disclose the host network in which data are transmitted by means of a telegram having a header section comprising a plurality of bytes [Figure 7 «items 200, 202»] and where the information is contained in a predetermined one of the plurality of

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bytes of the header section but does not explicitly disclose a MOST network or a MOST telegram.

17> In an analogous art, the MOST spec discloses a data telegram wherein the network is a MOST network in which data are transmitted by means of MOST telegrams having a header [section 2.1 | section 4 | section 6 (“MOST Frame Structure”)]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the Jha’s ring network and frames as a MOST network and MOST telegrams respectively, to obtain MOST’s advantages and functionality of increasing the speed of the network and decreasing cost of technology in automotive environments.

18> Claims 17 and 19 are rejected under 35 U.S.C § 103(a) as being unpatentable over Jha, in view of in view of Flanders et al, U.S Patent No. 6,172,980 [“Flanders”].

19> As to claim 17, Jha discloses that his network is suited for transporting data of

20> extraneous standards [column 14 «lines 24-30»], but does not explicitly disclose that the extraneous standard comprises a Transmission Control Protocol (TCP) standard.

21> Flanders teaches a data telegram wherein the extraneous standard is TCP [column 7

22> «lines 12-14»]. It would have been obvious to one of ordinary skill in the art to implement TCP as the extraneous standard for Jha’s data telegram, as TCP is a ubiquitous standard in the network arts.

23> As to claim 19, Jha discloses that his network is suited for transporting data of
24> extraneous standards and especially packets [column 14 «lines 24-30»], but does not
explicitly disclose that the extraneous standard comprises an Internet Packet Exchange
protocol (IPX) standard.

25> Flanders teaches a data telegram wherein the extraneous standard is IPX [column 6
26> «lines 8-11»]. It would have been obvious to one of ordinary skill in the art to
implement IPX as the extraneous standard for Jha's data telegram, as IPX is a ubiquitous
standard in the network arts.

27> Claims 21, 24-26 and 28-30 are rejected under 35 U.S.C § 103(a) as being unpatentable
over the MOST spec, in view of Jha.

28> As to claim 21, the MOST spec discloses a data telegram for transmitting data within
a MOST network having a MOST standard that defines the transmission of data within the
MOST network, the data telegram comprising:

a data section containing data formatted in accordance with a prescribable extraneous
standard that is different than the MOST standard [section 2.5 | sections 5, 6.7, 6.8.(1-4)
where : the MOST standard is compatible with a number of different protocols, the packets
of which are transported to the various nodes using the MOST standard].

The MOST spec also discloses a header section having a plurality of bytes [section 5, page 31] but does not explicitly disclose that the header section has a predetermined region of which contains information specifying that the data section is formatted according to the extraneous standard, that the data section has a pair of regions, or the header section contains a telegram identification portion and a telegram length portion.

29> Similar to Jha, MOST spec is directed towards transporting various data types within container structures [section 6.6, section 9 : “equipment such as multimedia computers, analog audio gateways, multimedia CD players, hi-fi audio equipment, telecommunication terminals...etc, can all be networked to interact”]. As such, one of ordinary skill in the art would realize the need for a means of identification of the data stored in the containers so the destination nodes are aware of the kind of data they are receiving. Jha discloses a network similar to MOST [a hybrid data transport over optical networks], and specifically, a data section having a pair of regions, one region in the pair of regions containing the data, and the second region containing header information associated with the extraneous standard specified in the header section [Figure 7 | column 7 «lines 39-60»], as well as a header section having a predetermined region that contains information specifying that the data within the data section are formatted according to the extraneous standard [column 7 «lines 46-49»]. Jha also discloses a telegram identification portion and a telegram length portion within the header section [see claim 11 rejection, above]. The purpose of these portions are to enable the system to make appropriate decisions on how to handle the data contained within the telegram by determining the protocols and length of the packet [see Jha, Figure 11 | Figure 12].

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Jha's header functionality into MOST's header to enable identification of the multiple traffic types (standards) of the data payload. Further, it would have been obvious to incorporate Jha's data section with its pair of regions into MOST's data section to enable an increase in the data traffic capabilities of the MOST network.

30> As to claim 24, the MOST spec discloses the data telegram of claim 21, where the information is contained in the header section [section 5 - page 31], but does not explicitly state that the it is contained in the last byte of the header section.

31> Saito discloses a frame header that stores information of the kind of data in the last byte of the header section [column 1 «line 60» to column 2 «line 1»]. It would have been obvious to one of ordinary skill in the art to implement Flanders' header into the MOST header to obtain the advantage of having a fixed location for the protocol identifier in the header; this way, the network devices can quickly locate the protocol type of the data.

32> As to claim 25, the MOST spec discloses the data telegram of claim 21, where the extraneous standard comprises a Transmission Control Protocol (TCP) standard [section 2.5 - see "MOST 'Open' Model" figure].

33> As to claim 26, the MOST spec discloses the data telegram of claim 21, wherein the

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extraneous standard comprises an Internet Protocol (IP) standard [section 2.5, section 9 – see “MOST ‘Open’ Model” figure and “multimedia computers”].

34> As to claim 28, the MOST spec discloses a MOST multimedia system comprising:
a plurality of multimedia devices communicably coupled through a communication path and defining a MOST network, where the MOST network includes a standard that defines transmission of data within the MOST network, and wherein the multimedia devices transmit and receive data telegrams within the MOST network standard [sections 2.1 and 2.4],

wherein the data telegram comprises:

a data section containing data formatted in accordance with a prescribable extraneous standard that is different than the MOST standard [section 2.5 | sections 5, 6.7, 6.8.(1-4)].

The MOST spec also discloses a header section having a plurality of bytes [section 5] but does not specifically disclose a header has a predetermined region that specifies that the data section is formatted according to the extraneous standard nor does he disclose a data section having a pair of regions, one region in the pair of regions for the data, and where a second region in the pair of regions in the data section containing header information associated with the extraneous standard, that the data section has a pair of regions, or the header section contains a telegram identification portion and a telegram length portion.

35> Similar to Jha, MOST spec is directed towards transporting various data types within container structures [section 6.6, section 9 : “equipment such as multimedia computers,

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analog audio gateways, multimedia CD players, hi-fi audio equipment, telecommunication terminals...etc, can all be networked to interact"]. As such, one of ordinary skill in the art would realize the need for a means of identification of the data stored in the containers so the destination nodes are aware of the kind of data they are receiving. Jha discloses a network similar to MOST [a hybrid data transport over optical networks], and specifically, a data section having a pair of regions, one region in the pair of regions containing the data, and the second region containing header information associated with the extraneous standard specified in the header section [Figure 7 | column 7 «lines 39-60»], as well as a header section having a predetermined region that contains information specifying that the data within the data section are formatted according to the extraneous standard [column 7 «lines 46-49»]. Jha also discloses a telegram identification portion and a telegram length portion within the header section [see claim 11 rejection, above]. The purpose of these portions are to enable the system to make appropriate decisions on how to handle the data contained within the telegram by determining the protocols and length of the packet [see Jha, Figure 11 | Figure 12].

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Jha's header functionality into MOST's header to enable identification of the multiple traffic types (standards) of the data payload. Further, it would have been obvious to incorporate Jha's data section with its pair of regions into MOST's data section to enable an increase in the data traffic capabilities of the MOST network.

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36> As to claims 29 and 30, they do not teach or further define over the limitations recited in claims 24-26. Therefore, claims 29 and 30 are also rejected for the same reasons set forth in claims 24-26, supra.

37> Claim 27 is rejected under 35 U.S.C § 103(a) as being unpatentable over MOST and Jha, in further view of Flanders.

38> As to claim 27, the MOST spec discloses compatibility with a number of extraneous standards, including IP (see paragraph 32, section 9 : "telecommunication terminals"), but does not explicitly state that the extraneous standard is an Internet Packet Exchange (IPX) protocol standard.

39> Flanders discloses IPX as an extraneous standard for a data telegram [column 6 <lines 8-11>] where IPX and IP are compared to each other as routing protocols. Therefore, it would have been obvious to one of ordinary skill in the art to have implemented IPX as an extraneous standard into the MOST spec as well in addition to IP, as they are both routing protocols, and would have obtained the further advantage of being compatible with IPX.

Conclusion

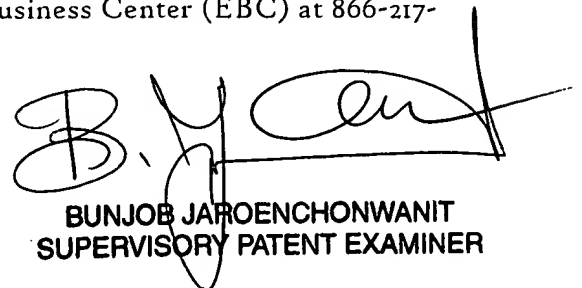
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Monday-Thursday [7:00 AM to 5:00 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

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